

REMARKS

Claims 30 – 57 are pending in the application.

Appropriate headings have been added to the specification, and the abstract and claims from the literal translation have been replaced by an abstract and claims drafted in conformity with U.S. Patent practice.

Applicant has attempted to be fully compliant in response to the Notice of Non-Complaint Amendment. A clean version of the changed paragraphs in the specification is provided in this letter as well as a marked up version showing the changes made. All other information provided in the original preliminary amendment is also included in this letter. Should any other changes be required, Applicant would be pleased to provide them immediately.

With this submission, Applicant believes the application is in condition for allowance and action to that end is respectfully requested.

Should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

Respectfully Submitted,



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VERSION WITH MARKINGS SHOWING CHANGES MADE:

IN THE SPECIFICATION:

Page 10, line 14, delete "underside" and insert -- surface --.

The substrate holder 5 comprises a base plate 8 which, on the upper side thereof that faces the transport device, is provided with a recess 10 for the appropriate accommodation of the rotary shaft 6. The substrate holder 5 is rotationally symmetrical relative to an axis of rotation A of the rotary shaft 6. A recess 12 for receiving a substrate 13 is formed in the underside 11 of the base plate 8, which underside faces away from the transport device. The substrate 13 is accommodated in the recess 12 in such a way that a surface 15 of the substrate that is to be coated faces away from the substrate holder and is exposed. The depth of the recess 12 corresponds to the thickness of the substrate that is to be accommodated, so that the underside 11 of the base plate 8 is flush with the surface 15 of the substrate that is to be coated when the substrate 13 is inserted into the recess. However, if desired, the [underside] surface 15 can also be spaced from the plane defined by the underside 11 of the base plate 8, and in particular can project downwardly beyond the underside 11. The substrate 13 is held on the substrate holder 15 by non-illustrated vacuum openings that are formed in the base plate and communicate with a non-illustrated source of vacuum, such as a vacuum pump.

On page 13, line 19, delete "underside 11" and insert -- main body 8 --.

The substrate holder 5 again has a base plate 8, which on its upper side is provided with a recess 10 for receiving a rotary shaft. In contrast to the embodiment of

Figs. 1-6, the underside 11 of the main body 8 that faces the substrate is not provided with a recess for accommodating the substrate 13. The [underside 11] main body 8 is flat, and the substrate 13 is held against the base plate 8 via vacuum openings 50 in the main body 11. As was the case with the first embodiment of Figs 1-6, the vacuum openings 50 are in contact with a vacuum source. Formed in the underside 11 of the main body 8 is a groove that surrounds the vacuum openings 50 for receiving a sealing element, such as an O-ring 52.

Page 14, line 23, delete "B" and insert -- 13 --.

The cover 20 is again provided with a central wall 28 having a central plane B to which the upper and lower sides of the cover 20 are symmetrical. Therefore, again only the upper portion of the cover 20 will be described. A circumferential flange 30 having a planar upper surface 31 again extends upwardly in the outer region of the central wall 28. The flange is rotationally symmetrical relative to the central axis C, which pursuant to Fig. 7 coincides with the axis of rotation A of the substrate holder 5. The flange 30 is again provided with a notch 32 that is adjacent to and flush with the central wall. By means of the notch 32, an inwardly extending projection 34 of the flange 30 is formed. The inner periphery 62 of the projection is dimensioned such that a substrate [B] 13 that is to be coated can be received within or between the projection without contacting the same. The notch 32 has an inclined upper side 60, so that the notch 32 is tapered radially outwardly.

Page 15, line 8, delete "main body 5" and insert -- main body 8 --.

The flange 30 has a further projection 64 that extends axially from the planar upper

surface 31 and defines a downwardly tapering inner peripheral surface 66. The downwardly tapering inner peripheral surface 66 is adapted to the outer peripheral shape of the substrate holder 5 and forms a slanted centering portion, so that the [main body 5] main body 8 can slide along the inner peripheral surface 66 until the underside 11 of the main body 8 of the substrate holder 5 rests upon the planar upper surface 31 of the flange 30 of the cover 20. By means of the tapering inner circumferential shape, a centering of the substrate holder 5 relative to the cover 20, and hence a centering of the substrate 13 relative to the substrate holder 5, is ensured.

Page 19, line 5, insert the following two new paragraphs.

The specification incorporates by reference the disclosure of German priority document 199 06 398.2 of 16 February 1999 and International priority document PCT/EP00/00380 of 19 January 2000.

The present invention is, of course, in no way restricted to the specific disclosure of the specification and drawings, but also encompasses any modifications within the scope of the appended claims.

IN THE CLAIMS:

New claims 30 - 57 are attached.

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30. An apparatus for coating substrates, comprising:

5 a substrate holder for holding thereon a substrate in such a way that a surface of said substrate that is to be coated is exposed and is directed downwardly;

a means for rotating said substrate holder; and

10 a cover that is securable to said substrate holder, wherein said cover, together with said substrate holder, are adapted to form a sealed chamber for receiving the substrate.

31. An apparatus according to claim 30, wherein a holding mechanism is provided on said substrate holder for holding the substrate by means of vacuum.

15 32. An apparatus according to claim 31, wherein a holding mechanism is provided on said substrate holder for holding said cover by means of vacuum.

33. An apparatus according to claim 32, wherein said holding mechanisms for the substrate and for said cover are connected to a common vacuum source.

20 34. An apparatus according to claim 32, wherein said holding mechanisms for the substrate and for said cover are adapted to be controlled independently of one another.

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35. An apparatus according to claim 32, wherein at least one sealing means is provided for delimiting a vacuum region between said substrate holder and said cover.

5 36. An apparatus according to claim 30, wherein said substrate holder is provided with a recess for an at least partial accommodation of the substrate.

B⁴ 37. An apparatus according to claim 30, wherein a centering mechanism is provided for a mutual centering of said cover and said substrate holder.

10 38. An apparatus according to claim 37, wherein said centering mechanism is in the form of at least one slanted centering portion on at least one of said substrate holder and said cover.

Sub 39. An apparatus according to claim 30, wherein said cover is symmetrical relative to a central axis C thereof.

15 40. An apparatus according to claim 30, wherein a notch is provided in an outer region of a portion of said cover that defines said chamber.

41. An apparatus according to claim 40, wherein said notch tapers outwardly.

20 42. An apparatus according to claim 40, wherein said notch is inclined on a side thereof that faces said substrate holder.

43. An apparatus according to claim 39, wherein said cover is symmetrical relative to a central plane B thereof.

44. An apparatus according to claim 30, wherein a device is provided for turning said cover.

45. An apparatus according to claim 40, wherein a receiver is provided for supporting said cover.

5 46. An apparatus according to claim 45, wherein a device is provided for raising and lowering said receiver.

Sub 47. An apparatus according to claim 45, wherein a rinsing and/or drying device is provided for said cover.

10 B⁴ 48. An apparatus according to claim 47, wherein said rinsing and/or drying device is part of said receiver and is provided with at least one nozzle that is directed against at least one of said cover and said notch.

49. An apparatus according to claim 48, wherein at least one nozzle is adapted to be supplied with a rinsing and/or drying fluid.

15 50. An apparatus according to claim 49, wherein said rinsing fluid contains a solvent.

51. A method for coating substrates, including the steps of:
holding a substrate on a substrate holder in such a way that a surface of the substrate that is to be coated is exposed and is directed downwardly;

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securing to said substrate holder a cover that together with said substrate holder forms a sealed chamber for receiving the substrate;
rotating the substrate together with said substrate holder.

52. A method according to claim 51, wherein at least one of the substrate and said cover is held or secured on said substrate holder by means of vacuum.

53. A method according to claim 52, which includes the step of centering said cover and said substrate holder relative to one another prior to the holding or securement.

54. A method according to claim 51, wherein after said step of rotating the substrate, the securement of said cover is released independent of the holding of the substrate.

55. A method according to claim 51, wherein during said step of rotating the substrate a side of said cover that faces away from the substrate is rinsed and/or dried.

56. A method according to claim 51, wherein a rinsing or drying fluid is conveyed against said cover by means of at least one nozzle.

57. A method according to claim 51, which includes the step of turning said cover between successive ones of said rotating steps.

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